

UNITED STATES COAST PILOT CORRECTIONS

COAST PILOT 7 37 Ed 2005 Change No. 8
LAST NM 19/05

Page 266—Paragraph 196, line 6 to Page 272—Paragraph 292; read:

940 yards S of the end of Belmont Pier.

Charts 18751, 18749

San Pedro Bay, between Seal Beach on the E and Point Fermin on the W, is 82 miles NW of San Diego. On the shores of the bay are the cities and port areas of **Long Beach** and **Los Angeles**. **Terminal Island**, in the NW part of San Pedro Bay, separates the outer bay from Los Angeles and Long Beach inner harbors. The bay is protected by breakwaters and is a safe harbor in any weather.

Long Beach Harbor, in the E part of San Pedro Bay, includes the City of Long Beach and part of Terminal Island.

Los Angeles Harbor, at the W end of San Pedro Bay, includes the districts of **San Pedro**, **Wilmington**, and a major part of Terminal Island.

Long Beach and Los Angeles Harbors are connected by Cerritos Channel. The distance between the seaward entrance to the two harbors is about 4 miles.

Four oil production islands, marked by lights, are to the N and E of Long Beach Pier J. A fog signal is sounded from the S end of each island.

The **Port of Long Beach**, one of the largest ports on the Pacific coast, has the reputation of being America's most modern port. It has extensive foreign and domestic traffic with modern facilities for the largest vessels. It is a major container cargo port with several of the largest and most efficient container terminals on the Pacific coast. Some of the principal exports are bulk petroleum, bulk coke, steel and steel products, bulk potash, grains, fresh fruits, scrap steel, animal feed, and copper concentrate. Some of the principal imports are crude petroleum, steel and steel products, motor vehicles and parts, machinery, bulk gypsum, newsprint, lumber, bulk salt, bananas, plywood, and bulk molasses.

The **Port of Los Angeles**, also one of the largest ports on the Pacific coast, has a history of leading the Pacific coast ports in terms of tonnage handled. It has extensive facilities to accommodate all types of traffic. Some of the principal exports are crude minerals, iron and steel scrap, inorganic chemicals, animal feed, cotton, manufactured fertilizers, and fresh fruits and nuts. Some of the principal imports are iron and steel products, motor vehicles and parts, organic chemicals, fresh fruits/nuts, paper/paperboard, sugar, molasses and syrups, glass, and fresh/frozen fish.

Prominent features

San Pedro Hill (chart 18746), 3.3 miles NW of Point Fermin, is the distinguishing feature for making San Pedro Bay from SE or W. The hill terminates seaward in steep, rocky cliffs about 60 feet high, with several horizontal terraces between them and the summit. On top of the summit are two large white radar domes.

Because it is high above the usual low-lying fog area, the lighted tower atop Santa Catalina Island is reported a useful

guide for vessels approaching the Los Angeles-Long Beach area; the light can be seen for about 16 miles.

Point Fermin, the SE extremity of San Pedro Hill, is a bold cliff about 100 feet high. **Point Fermin Light**, 120 feet above the water, is shown from a pole on the southern extremity of the point. A prominent pavilion (The Bell of Friendship) is on the high ground about 0.3 mile N of the light.

Signal Hill, Long Beach, rises to a height of 355 feet about 2 miles from the beach, and is readily recognized because of several radio towers around it.

In Long Beach Harbor, prominent charted objects are the SW rectangular part of the charted L-shaped building at Berth F211 (which is the prominent gray rectangular tower of the Koch Carbon Terminal), a green hotel tower (marked by a large blue letter "b") located just N of the Municipal Auditorium, and the white stone tower of another hotel 0.4 mile E, and the lighted large white dome on the S side of the entrance to Queensway Bay. The derricks on the artificial oil islands E of Long Beach Pier J are constructed to appear as high-rise apartment buildings.

Two prominent charted objects in Los Angeles Harbor which are of use to the navigator are the green and white tank near the S end of Pier 1 and the lighted radio tower atop San Pedro City Hall.

Long Beach Light (33°43'23"N., 118°11'12"W.), 50 feet above the water, is shown from a 42-foot white rectangular tower on a white building on the E end of Middle Breakwater; a fog signal is at the light.

Note: The Long Beach Pilots have established a current meter in about 57 feet of water 0.41 mile and bearing 198.5° from Long Beach Light. A cable runs from the meter to the Long Beach Light. Mariners are requested to avoid anchoring or bottom fishing in this area.

Los Angeles Light, (33°42'30"N., 118°15'05"W.), 73 feet above the water, is shown from a 69-foot white cylindrical tower on a concrete block on the outer end of the San Pedro Breakwater. A fog signal is at the light.

COLREGS Demarcation Lines

The lines established for San Pedro Bay are described in **80.1114**, chapter 2.

Traffic Separation Scheme, Los Angeles/Long Beach, also known as **Traffic Separation Scheme, Gulf of Santa Catalina**, is in the approaches to Los Angeles/Long Beach. The Scheme leads from the Gulf of Santa Catalina through San Pedro Channel and Santa Barbara Channel to Point Arguello. (See charts 18022, 18740, 18720, 18725, 18746, 18721.) This Traffic Separation Scheme is recommended for use by all vessels traveling between the points involved, and is composed basically of four elements; (1) **Northbound Lanes**, (2) **Separation Zone**, (3) **Southbound Lanes**, and (4) **a Precautionary Area**. Traffic Lanes have been designed to aid in the prevention of collisions at the approaches to major harbors and along heavily traveled waters, but are not intended in any way to supersede or to alter the applicable Navigation Rules. Separation zones are intended to separate N and S traffic lanes, to be free of ship traffic, and should not be used except for crossing purposes. Mariners should use extreme caution when crossing traffic lanes and separation

zones. Rule 10 of the collision regulations apply to this Traffic Separation Scheme.

Extreme caution must be exercised in the Precautionary Area off the entrances to Los Angeles and Long Beach Harbors as both incoming and outgoing vessels use this area. (See also Traffic Separation Schemes, chapter 1, for additional information.)

Ferry Routes in the Gulf of Santa Catalina and San Pedro Channel differ from the Traffic Separation Scheme in that area. Mariners using the area's Traffic Separation Scheme are advised to **use caution and beware of crossing ferries** enroute between local coastal ports and ports at Santa Catalina Island.

The **Vessel Traffic Service (VTS) Los Angeles/Long Beach**, operated by the Marine Exchange in cooperation with the U.S. Coast Guard, has been established within the approaches to the ports of Los Angeles and Long Beach.

The Vessel Traffic Service is a California State mandatory service and a federally mandated Vessel Movement Reporting System (VMRS), and is designed to enhance navigational safety in the main approaches to the ports of Los Angeles and Long Beach. Mandatory participation and monitoring of VHF-FM channel 14 is required by state and federal law for participating vessels.

VTS Area: The VTS Area consists of Los Angeles and Long Beach Harbors (inside the breakwater), and the waters of San Pedro Bay and San Pedro channel, including Santa Monica Bay, within a 25 nautical mile radius of Point Fermin Light. This includes all of the Precautionary Area and portions of the Traffic Separation Scheme Lanes.

VTS Communications: The responsibility of information exchange in the VTS Area outside the breakwater will be handled by the Marine Exchange Vessel Traffic Center (VTC), and inside the breakwater by the appropriate Pilot Station.

All reports and communications made to the VTC (voice call "**San Pedro Traffic**") shall be on VHF-FM channel 14, to Los Angeles Pilots on VHF-FM channel 73, and to Long Beach Pilots on VHF-FM channel 12 or 74. All stations monitor VHF-FM channels 16 and 13.

If arrival/departure information has been given and new data is received by the VTS, the VTS will attempt to contact vessels to pass the updated information. In addition, a traffic advisory broadcast is given on VHF-FM channel 14 every hour on the quarter hour. Other navigational information may be given on a case by case basis.

The **Marine Exchange** of Southern California records, classifies, and disseminates information on ship arrivals to, departure from, and movement within the Los Angeles/Long Beach harbors. The Exchange, about 0.4 mile N of Point Fermin, is manned 24-hours a day. It has a visual lookout, VHF-FM radiotelephone, visual communication capability, and a battery of landline telephones. The station, call sign KGW-299, monitors VHF-FM channel 16 and 13, and uses channel 14 for working.

Active User (VMRS)

The following vessels are required to comply with Vessel Movement and Reporting Procedures:

- (a) Every power driven vessel 40 meters (approx-

mately 131 feet) or more in length while navigating;

- (b) Commercial towing vessels 8 meters (approximately 26 feet) or more in length that are towing alongside, astern, or by pushing ahead;

- (c) Every vessel certified to carry 50 or more passengers for hire while engaged in trade, under sail or power.

Passive User (VTS)

These vessels are required to monitor VHF-FM channel 14 and must respond when hailed by the VTS and must comply with operating rules;

- (a) Power driven vessels of 20 meters (approximately 65 feet) or more in length;

- (b) Vessels of 100 gross tons or more carrying one or more passengers for hire, while engaged in trade, regardless of length, whether under sail or power;

- (c) Every dredge or floating plant.

Non Participant

Vessels that do not fall into the active or passive user categories such as fishing boats, yachts, and recreational boats can greatly enhance the safety of navigation in the VTS area by listening on VHF-FM channel 14 and by maintaining a sharp lookout. It is not necessary to participate actively.

Vessel Movement and Reporting Procedures:

All participating vessels when underway and entering the VTS Area from sea shall contact the VTC on VHF-FM channel 14 and report the following information:

- (a) Vessel name/call sign.

- (b) Course and speed.

- (c) Vessel destination.

- (d) State whether taking on a pilot or being piloted by master/commanding officer.

- (e) ETA breakwater sea buoy/pilot station.

Entering the Precautionary Area:

Prior to entering the Precautionary Area, all participating vessels shall:

- (a) Contact the VTC and report that the master/commanding officer is on the bridge and the vessel is being steered by hand.

- (b) Vessels under 40 meters subject to USCG/IMO standards shall have the senior licensed or certified person on board to be in charge of the navigation of the vessel when underway within the Precautionary Area.

- (c) Vessels of 40 meters or greater, when in the Precautionary Area, shall not exceed 12 knots.

- (d) Vessels when underway within the Precautionary Area should maintain a minimum vessel separation of .25 nautical mile (460 meters).

- (e) Vessels crossing the Precautionary Area, maneuvering in an unusual manner (i.e. compass/RDF calibration or drills/exercises), and arriving/departing anchorages outside the breakwater shall notify the VTC and advise of their intentions.

Entering the Pilot Areas:

- (a) All vessels shall contact the appropriate pilot stations

prior to entering the pilot areas to receive vessel traffic information inside the breakwater. Vessels shall provide the following information to pilot stations:

- (1) Vessel name/call sign.
- (2) ETA breakwater or sea buoy/pilot station.
- (3) Vessel destination.

Departing Berth or Anchorage:

(a) All vessels shall contact the appropriate pilot station prior to departing a berth or anchorage to receive vessel traffic information inside the breakwater. Provide the following information to the pilot station:

- (1) Vessel name/call sign.
- (2) Advise who is piloting vessel.
- (3) Vessel destination, whether to sea or destination within harbor.

(b) All outbound vessels shall notify VTC on VHF-FM channel 14 at least 15 minutes prior to passing breakwater entrance, including Anaheim Bay, and provide the following information:

- (1) Vessel name/call sign.
- (2) Vessel destination port or direction of departure, and advise if the vessel will be using or crossing the Traffic Separation Scheme.
- (3) Advise VTC when leaving the Precautionary Area and when leaving the VTS Area.

All vessels shall comply with Navigation Rules (having particular regard for rules for vessels operating in and near Traffic Separation Schemes) and with the rules of the Regulated Navigation Area in San Pedro Bay (See **165.1 through 165.13 and 165.1152**, chapter 2, for limits and regulations.)

Participating vessels are to ensure that a copy of the **VTS Users Manual** is available on board the vessel when operating within the VTS area. The manual is available at no charge from Executive Director, Marine Exchange of Southern California, P.O. Box 1949, San Pedro, CA 90733, phone (310) 832-6411 or can be viewed and downloaded from the Internet at **www.mxsocal.org**.

The State of California has established Tank Vessel Escort Regulations for tank vessels underway in the Los Angeles/Long Beach Harbor and their approaches. The full text of the regulations can be found on the Internet at **www.dfg.ca.gov/Ospr** or can be obtained from the California Office of Spill Prevention and Response 24-hour Communications Center at (916) 445-0045.

Tug Escort Applicability: All laden tank vessels (tankers or barges carrying as cargo a total volume of oil greater than or equal to 5,000 long tons of oil) entering the port should ensure proper implementation of the Displacement Ton/Tug Braking Force Table listed below. In addition, to meet the requirements of the **Force Selection Matrix**, tractor tugs shall be tethered, inbound and outbound. Conventional tugs may be tethered or untethered inbound, but shall be tethered outbound. Inbound, laden Oil and Chemical Tank Vessels shall not proceed closer than two nm from the Federal Breakwater entrance unless the prescribed escort tug(s) are in position at the southern boundary of the pilot operating areas. Masters shall also ensure the anchors are ready for letting go prior to entering the pilot operating areas. The tank vessel master/pilot shall hold a "pre-escort conference" that

should at a minimum include:

1. Contacting the escort tug operator to confirm the number and position of the escort tug(s); and
2. Establishing the radio frequency to be used; and
3. Establishing the destination of the tank vessel; and
4. Discussing any other pertinent information that the master/pilot and escort tug operator deem necessary.

These standards reflect favorable circumstances and conditions. Adverse weather, unusual port/traffic congestion or other conditions/circumstances may require additional tug-boat assistance.

An "Escort Tug," as defined by California regulations, is a tug that is designed primarily for pushing or pulling ahead or astern, or towing alongside another vessel. A tug is considered to be designed for escort work whether or not it is involved in such activity. In the harbors of Los Angeles/Long Beach, an "Assist/Escort Tug" means any tug that is accepted by the tank vessel master and/or pilot to escort a tank vessel that is transiting waters where an assist/escort is required. Arrangements should be made via the vessel agent, tug company and appropriate pilot service. Outbound laden tank vessels are not required to use tugs once they have safely cleared the breakwater. All tank vessels shifting within the harbor(s) (including dock to anchor, anchor to anchor, and dock to dock) shall comply with the escort requirements. Arrangements should be made via the vessel agent, tug company or appropriate pilot service to ensure compliance.

(See **33 CFR 157**, chapter 2, for regulations for Tank Vessels Carrying Oil in Bulk and Maneuvering Performance Capability.)

Vessel Speed Reductions, in addition to the mandatory 12 knot speed limit in the Los Angeles/Long Beach Vessel Traffic Service (VTS) Precautionary Area, the following excerpt is from Rule 402 from the South Coast Air Quality Management District (SCAQMD):

The Port of Long Beach asks every vessel entering or leaving the port to observe the **voluntary 12-knot speed limit** that extends seaward 20 nautical miles from Point Fermin. Reducing ship speed will reduce exhaust emissions into Southern California's air, which will result in better air quality. The speed of every vessel in the speed reduction zone is measured and recorded by the Marine Exchange of Southern California; please contact the Marine Exchange for more information. Your cooperation with this important air quality improvement program is greatly appreciated.

Vessels making the breakwater entrances should proceed at speeds no greater than is necessary for steerage. Vessels that approach the entrance close in and attempt to turn at or near the entrance are in danger of collision with outbound vessels, especially with smaller craft at night when their lights are not easily distinguishable at low tide or against the background of lights in the harbor.

Vessels awaiting a pilot should stay well to seaward and E of the outer fairway buoys.

San Pedro Breakwater extends about 0.9 mile in a SE direction from the E side of Point Fermin, then turns ENE for another 0.9 mile to Los Angeles Light. **Middle Breakwater** extends ENE for 2.1 miles from the Los Angeles entrance, thence E for 1 mile to the Long Beach entrance, and is marked at both ends by lights. **Long Beach Breakwa-**

ter extends E 2.2 miles from Long Beach entrance and is marked by lights on both ends. Ranges for a **090°–270° measured nautical mile** are on the Long Beach Breakwater. They are yellow diamond-shaped daymarks on iron pipes.

Kelp beds are along the inside edge of the W end of Middle Breakwater and a shallow water habitat is on the inside edge of San Pedro Breakwater; the shallow water habitat is surrounded by a submerged dike and is marked by lights.

Fish Harbor, on the S side of Terminal Island near its W end, is protected by two sets of breakwaters and the mole of Pier 300, the outer ends of which are marked by lights. A dredged channel with a controlling depth of about 14 feet leads between the outer and inner breakwaters to Fish Harbor, which has depths of about 16 to 18 feet. The seawall is lined with canneries and other fish works. The outer breakwaters enclose the Yacht Club Anchorage, sometimes called the Fish Harbor Extension. This anchorage has depths of 17 to 20 feet E and depths of 11 to 14 feet W of the dredged channel.

Channels

Long Beach Channel leads NW from W of Long Beach Breakwater for 2.2 miles to **Middle Harbor**, thence N to **Back Channel** and the **Inner Harbor**. The channel has a slight “dogleg” 1.5 miles NW of the breakwater to facilitate passage in and out of the Pier J berthing areas. A **restricted harbor entrance area** has been designated in the channel and side areas which extends from about 1 mile N of the breakwater to inside Middle Harbor; regulations of the Board of Harbor Commissioners, Port of Long Beach, grant priority to outbound vessels and stipulate a **6-knot speed limit** in this restricted area.

Most of the channels in Long Beach Harbor are maintained at more than the project depth of 35 feet. (See Notice to Mariners and latest editions of charts for controlling depths.)

Los Angeles Main Channel leads NW from E of the San Pedro Breakwater for about 1 mile, thence N to the Inner Harbor turning basin, thence NE through **East Basin Channel** and **Cerritos Channel**. About 0.6 mile NW of the breakwater, **Super Tanker Channel** leads W from the Main Channel to the deep-draft facilities at Berths 45–50. Los Angeles Main Channel from the breakwater to the Super Tanker Channel and the Super Tanker Channel are maintained at more than the project depth of 45 feet and 40 feet, respectively. (See Notice to Mariners and latest editions of charts for controlling depths.)

Los Angeles Main Channel is marked by a **296°** lighted range, and the Super Tanker Channel is marked by a private **255°** lighted range.

Los Angeles Main Channel, Inner Harbor turning basin, West Basin, East Basin Channel, East Basin, and part of Cerritos Channel are currently undergoing extensive dredging through March 2005. Mariners are advised to exercise caution in the areas and to consult the Captain of the Port LA/LB for more detailed information.

Vessels should keep clear of the 500-foot-wide Los Angeles Main Channel during the passage of deep-laden tankships to and from Berths 45–47. These vessels, because of their deep draft, must remain in the channel. Vessels not carrying

a Los Angeles pilot may obtain information on the movement of such vessels by contacting the Los Angeles Pilot Station on VHF-FM channel 73, call sign KEB-260; or on VHF-FM channel 16 (156.80 MHz).

Anchorage

Limits and regulations of general, naval, explosives, and special anchorage areas in San Pedro Bay are given in **110.1, 110.100, and 110.214**, chapter 2. When inside the breakwaters, vessels are required to anchor in the anchorage area prescribed in the regulations except in cases of great emergency. The Santa Ana is the only wind dangerous to vessels anchored inside the breakwaters.

The shallow water habitat along the E side of Pier 400 and about 0.4 mile S of the Naval Base Mole extends into Commercial Anchorage B (33 CFR 110.214), however, there are no boating or anchorage restrictions associated with the shallow water habitat.

Vessels are cautioned against anchoring in the vicinity of pipeline and cable areas shown on the charts.

Dangers

A shoal area, with a rock covered 3 feet and a rock awash near the outer end, extends about 0.3 mile S of the shore just E of Point Fermin Light. A lighted whistle buoy is about 300 yards SW from the S end of the shoal area.

Regulated navigation areas

A **regulated navigation area** has been established in the waters S of the Los Angeles-Long Beach breakwater encompassing the approaches to both Los Angeles and Long Beach harbors, the pilot areas, and Commercial Anchorage G. (See **165.1 through 165.13 and 165.1152**, chapter 2, for limits and regulations.)

Safety zones have been established in San Pedro Bay, including around the oil drilling platforms, in

33°35'45"N., 118°08'27"W (**Platform Edith**);

33°35'00"N., 118°07'40"W (**Platform Elly**);

33°34'57"N., 118°07'42"W (**Platform Ellen**); and

33°33'50"N., 118°07'00"W (**Platform Eureka**).

(See **147.1 through 147.20, 147.1104, 147.1108, and 147.1111**, chapter 2 for limits and regulations and chapter 3 under ‘**Oil well structures**’ for additional information.)

A **naval restricted area** is in the West Basin off the S shore of Terminal Island inside the jetty of the Naval Base Mole (See 334.990, chapter 2, for limits and regulations.)

A **restricted area** is off the E side of Reservation Point. (See **334.938**, chapter 2, for limits and regulations.)

(LL/04; NOS/05; NOS 18746; L 1830/04)

20/05

COAST PILOT 7

37 Ed 2005

Change No. 9

Page 334—Paragraphs 224 to 225; read:

Traffic Separation Scheme

Traffic Separation Scheme San Francisco has been established off the entrance to San Francisco Bay. (See chart 18645.) The scheme is composed of **directed traffic areas** each with one-way inbound and outbound **traffic lanes** separated by defined **separation zones**; a **precautionary area**; and a **pilot boat cruising area**. The Scheme is recom-

mended for use by vessels approaching or departing San Francisco Bay, but is not necessarily intended for tugs, tows, or other small vessels which traditionally

operate outside of the usual steamer lanes or close inshore.

The Traffic Separation Scheme has been designed to aid in the prevention of collisions at the approaches to major harbors, but is not intended in any way to supersede or alter the applicable Navigation Rules. Separation zones are intended to separate inbound and outbound traffic lanes and to be free of ship traffic, and should not be used except for crossing purposes. Mariners should use extreme caution when crossing traffic lanes and separation zones. (See Traffic Separation Schemes, chapter 1, for additional information.)

When not calling at San Francisco mariners are urged to sail direct between Point Arguello and Point Arena so as to pass the San Francisco Bay area to the W of the Farallon Islands and clear of the San Francisco Traffic Separation Scheme. In this manner through coastwise traffic will avoid crossing the directed traffic areas and/or precautionary area.

The **precautionary area** off the entrance to San Francisco Bay is inscribed by a circle with a radius of 6 miles centered on San Francisco Approach Lighted Horn Buoy SF (37°45.0'N., 122°41.6'W.) with the traffic lanes fanning out from its periphery. The W half of the circle has depths of 15 to 30 fathoms, the E half has lesser depths of 4 to 21 fathoms. Extreme caution must be exercised in navigating within the precautionary area inasmuch as both incoming and outgoing vessels use the area in making the transition between San Francisco Main Ship Channel and one of the established directed traffic areas as well as maneuvering to embark and disembark pilots. It is recommended that all vessels in the precautionary area guard VHF-FM channels 13 and 14.

A circular area to be avoided, with a 0.5 mile radius centered on the San Francisco Approach Lighted Horn Buoy SF, has been established in the precautionary area of the San Francisco Traffic Separation Scheme. This zone has been established for the protection of the lighted horn buoy.

Mariners are cautioned that San Francisco Approach Lighted Horn Buoy SF cannot be safely used as a leading mark to be passed close aboard, and are requested to stay outside that area.

The **pilot boat cruising area** is about 1 mile NE of the San Francisco Approach Lighted Horn Buoy SF. (See pilotage for San Francisco Bay, this chapter.)

Northern Traffic Lanes:

Traffic Lane, Inbound

The N approach to San Francisco is between Point Reyes and the Farallon Islands through the N inbound traffic lane that tapers from 1.7 miles to 1 mile wide in its length of about 15.4 miles. Entering the traffic lane at a point in about 37°55.0'N., 123°05.2'W., a course of **120°** follows the centerline of the traffic lane to the junction with the precautionary area; thence an ESE course for about 7 miles leads to the pilot boat cruising area. The least known depth in the traffic lane is 29 fathoms.

Traffic Lane, Outbound

The N exit from San Francisco Bay by outbound vessels is 6 miles, 312° from the San Francisco Approach Lighted Horn Buoy SF through the N outbound traffic lane that expands from 1 mile to 1.7 miles wide in its length of about 15.4 miles. A course of **305°** follows the centerline of the traffic lane to its end; thence steer usual courses to destination. Least known depth in the traffic lane is 25 fathoms.

Separation Zone

The N separation zone between the inbound and outbound traffic lanes tapers from 1.7 miles wide at its outer end to 1 mile wide at its junction with the precautionary area and is centered on a line bearing **302°** and passing through San Francisco Approach Lighted Horn Buoy SF and San Francisco Northern Traffic Lane Lighted Bell Buoy N (37°48.2'N., 122°47.9'W.).

Western Traffic Lanes:

Traffic Lane, Inbound

The SW approach to San Francisco Bay is SE of the Southeast Farallon Island through the main inbound traffic lane which tapers from 1.7 miles to 1 mile wide in its length of about 9.4 miles. Entering at a point in about 37°35.8'N., 122°56.9'W., a course of **058.5°** follows the centerline of the traffic lane to the junction with the precautionary area; thence a NE course for about 6.7 miles leads to the pilot boat cruising area. The least known depth in the traffic lane is 28 fathoms, except for the charted wreck 6.7 miles **226°** from San Francisco Approach Lighted Horn Buoy SF which has a minimum depth of at least 9.5 fathoms.

Traffic Lane, Outbound

The SW exit from San Francisco Bay by outbound vessels is 6 miles, 244° from the San Francisco Approach Lighted Horn Buoy SF through the main outbound traffic lane that expands from 1 mile to 1.7 miles wide in its length of about 8.8 miles. A course of **247°** follows the centerline of the traffic lane to its end; thence steer usual courses to destination. The least known depth in the traffic lane is 29 fathoms.

Separation Zone

The main separation zone between the inbound and outbound traffic lanes tapers from 1.7 miles wide at its outer end to 1 mile wide at its junction with the precautionary area and is centered on a line bearing 242.5° from San Francisco Main Traffic Lane Lighted Gong Buoy W (37°41.5'N., 122°47.7'W.).

Southern Traffic Lanes:

Traffic Lane, Inbound

The S approach to San Francisco Bay is through the 1-mile wide Southern Traffic Lane (Inbound) that has a length of about 12 miles. Entering at a point in about 37°27.0'N., 122°39.5'W., a **000°** course follows the centerline of the traffic lane to the junction with the precautionary area; thence a NNW course for about 6 miles leads to the pilot boat cruising area. Least known depth in the traffic lane is about 21

fathoms.

Traffic Lane, Outbound

The S exit from San Francisco Bay for outbound vessels is about 6 miles **195'** from the San Francisco Approach Lighted Horn Buoy SF through the 1-mile wide Southern Traffic Lane (Outbound) that has a length of about 12 miles. A course of **180°** follows the centerline of the traffic lane to its end. Least known depth in the traffic lane is about 25 fathoms.

Separation Zone

The S separation zone between the inbound and outbound traffic lanes is about 2 miles wide and 12 miles long, centered on a line bearing **000°** from San Francisco South Traffic Lane Lighted Bell Buoy S (37°39'00"N., 122°41'42"W.).

An additional **Traffic Separation Scheme** has been established through the Main Ship Channel and Golden Gate into San Francisco Bay. The scheme consists of one-way **traffic lanes** separated by a **separation line** and, after entry into San Francisco Bay, includes a **precautionary area**, a **regulated navigation area**, and **recreation areas**. For purposes of INTERNATIONAL NAVIGATION Rule 10, this scheme has been adopted by IMO seaward of the demarcation line. (See Traffic Separation Schemes, chapter 1, for additional information).

Vessel Traffic Service

Vessel Traffic Service San Francisco serves San Francisco Bay, its seaward approaches and its tributaries as far inland as Stockton and Sacramento. Participation is mandatory for certain vessels within navigable waters of the United States. (See **161.1 through 161.23 and 161.50**, chapter 2, for limits and regulations.)

The purpose of the San Francisco Vessel Traffic Service (VTS) is to coordinate the safe, secure, and efficient transit of vessels in San Francisco Bay including its approaches and tributaries in an effort

to prevent accidents with the possible associated loss of life, damage to property and the environment. VTS also fully supports Coast Guard and other public service missions through its unique communications and surveillance capabilities. The Vessel Traffic Center (VTC), located on Yerba Buena Island in San Francisco, is staffed 24 hours a day, seven days a week by Coast Guard personnel.

The VTS uses radar, closed-circuit television and VHF-FM radiotelephone to gather information, and uses VHF-FM radiotelephone to disseminate information. Information provided by the VTS is mostly generated from vessel reports; this information can therefore be no more accurate than the reports received from mariners coupled with the ability of VTS equipment to verify those reports. The VTS may not have first hand knowledge of hazardous circumstances existing in the VTS area. Unreported hazards may still confront mariners at any time. This service does not in any way supersede or alter applicable Navigation Rules. The owner, operator, charterer, master, or person directing the movement of the vessel remains at all times responsible for the manner in which the vessel is operated and maneuvered, and is responsible for the safe navigation of the vessel under all circum-

stances.

The VTS maintains a continuous radiotelephone watch on VHF-FM channels 12, 13, 14, and 16. The VTS is also equipped to communicate on all VHF-FM radiotelephone channels. The radio call sign is

"San Francisco Vessel Traffic Service." After communications have been established, the abbreviated call sign "Traffic" may be used. Mariners may also contact VTS by cellular or land-line telephone at (415) 556-2760.

The VTS area is divided into two sectors: offshore and inshore. The **Offshore Sector** consists of the ocean waters within a 38 nautical mile radius of Mount Tamalpais (37°55.8'N., 122°34.6'W.) excluding the San Francisco Offshore Precautionary Area. (The San Francisco Offshore Precautionary Area is the area within a six-mile radius of the San Francisco Approach Lighted Horn Buoy SF.) Channel 12 VHF-FM is the designated working frequency for the Offshore Sector. At minute 15 and minute 45 of each hour, VTS makes broadcasts giving the positions, courses, and speeds of participating vessels in the sector.

The **Inshore Sector** consists of the waters of the San Francisco Offshore Precautionary Area eastward to San Francisco Bay and its tributaries extending inland to the ports of Stockton, Sacramento, and Redwood City. VHF-FM Channel 14 is the designated working frequency for the Inshore Sector.

Reporting points for the San Francisco VTS area are as follows:

Offshore Sector:

- the "N", "W", "S" buoys marking the entrance to the Traffic Separation Scheme lane to be used
- the seaward end of the Traffic Separation Scheme lane used
- the outer limit of the Offshore Sector 38 nautical miles from Mount Tamalpais.

(These points are given as for an outbound transit; inbound vessels use the same points in reverse order.)

Inshore Sector:

- Pilot Area/Point of Entry into VTS area
- San Mateo Bridge
- Redwood Creek Entrance Light 2
- Dumbarton Bridge
- Richmond-San Rafael Bridge
- "E" buoy in San Pablo Bay
- Petaluma Channel Daybeacons 1, 2, and 19
- Mare Island Strait Light 1 (when inbound/outbound Mare Island Strait)
- Mare Island Causeway Bridge
- Carquinez Bridge
- Southern Pacific Railroad Bridge
- Naval Weapons Station Concord (Port Chicago)
- New York Point
- Antioch Bridge
- Prisoners Point

- Rio Vista Bridge
- Sacramento Deep Water Channel Lights 51 and 65
- when secured at the destination or when departing the VTS area

For detailed information about the VTS, go to the Coast Guard's VTS website at www.uscg.mil/d11/vtssf. The site contains links to the Users Manual, Communications Guide, Regulated Navigation Areas, and other information particularly useful to commercial and recreational mariners. Vessels operating within the VTS Area defined as VTS Users are reminded of the requirement to carry a copy of the National VTS Regulations aboard their vessel and are recommended to carry a copy of the San Francisco VTS User's Manual.

Routes

The routes for approaching San Francisco Bay are described in chapter 3 and at the beginning of this chapter under San Francisco Traffic Separation Scheme.

Taking care to avoid the circular 0.5-mile-radius area centered on San Francisco Approach Lighted Horn Buoy SF, steer a course to enter the charted eastbound San Francisco Bay traffic lane. The recommended route for outbound vessels is via the charted westbound San Francisco Bay traffic lane to the precautionary area of the San Francisco Traffic Separation Scheme.

Vessels with a draft of 45 feet or greater bound for the deepwater anchorages S of the San Francisco-Oakland Bay Bridge or N to San Pablo Bay and Carquinez Strait should use the charted **Deep Water Route E** of the Golden Gate Bridge. Vessels intending to use the Deep Water Route should notify San Francisco Traffic before passing Mile Rocks. Deep draft vessels will neither meet nor overtake in the Deep Water Route. Deep draft vessels bound for Anchorage 9, S of San Francisco-Oakland Bay Bridge, should pass E of Blossom Rock then through the C-D or D-E spans of the bridge.

From the Golden Gate Bridge, vessels with drafts less than 45 feet bound for San Pablo Bay and Carquinez Strait set a course to follow the charted Traffic Separation Scheme to the precautionary area E of Alcatraz Island, thence N through the charted Traffic Separation Scheme to San Pablo Bay and Carquinez Strait.

Mariners are cautioned that the traffic lanes between Angel Island and North Point are frequently crossed by tugs with barges, and self-propelled dredges. These vessels normally transit to and from the dumping ground S of Alcatraz Island.

(LL/05; NOS 18645; NOS 18680;
NOS/05;VTS Manual/04) 20/05

COAST PILOT 7 37 Ed 2005 Change No. 10

Page 258—Paragraph 68; read:

The State of California, with the approval of the Environmental Protection Agency, has established a No-Discharge Zone (NDZ) in San Diego Bay. The NDZ is comprised of the portion of San Diego Bay that is less than 30 feet deep at mean lower low water (MLLW), as determined from the most recent NOAA nautical chart.

Within the NDZ, discharge of sewage, whether treated or

untreated, from all vessels is prohibited. Outside the NDZ, discharge of sewage is regulated by **40 CFR 140** (see Chapter 2).

In addition to the **No-Discharge Zone** and concurrent with the federal regulations above, the **San Diego Unified Port District Code** (section 8.50) prohibits the discharge of any material, including sewage, into San Diego Bay without written permission by the Port Director.

(NOS 18773; NOS/05; CPM-20/04) 20/05

Page 324—Paragraph 27 to Page 327—Paragraph 55; strike out.

(NOS/05) 20/05

Page 328—Paragraph 69; strike out.

(NOS/05) 20/05

Page 329—Paragraph 88 to Page 333—Paragraph 212; strike out.

(NOS/05) 20/05

Page 334—Paragraph 228, line 6; read:
Bonita.

Regulated navigation areas

Security zones have been established in the entrance to San Francisco Bay (Main Ship Channel) and Golden Gate. (See **165.1183** and **165.1187**, chapter 2, for limits and regulations.)

A **Regulated Navigation Area** has been established in Golden Gate and San Francisco Bay. (See **165.1181**, chapter 2, for limits and regulations.)

(33 CFR 165) 20/05

Page 338—Paragraphs 258 to 262; strike out.

(NOS/05) 20/05

Page 339—Paragraph 269, line 3; read:

Horn Buoy SF.

Coast Guard

Golden Gate Coast Guard Station is about 0.4 mile NNE of the bridge at the entrance to Horseshoe Bay.

State regulations

Tank Vessel Escort Regulations have been established by the State of California for San Francisco, San Pablo, and Suisun Bays. Tank vessel masters, owners, and operators are expected to be familiar and in compliance with the regulations. Failure to be in compliance may result in unsafe transit delays, and fines. The regulations can be found on the internet at www.dfg.ca.gov, or may be obtained by calling the California Office of Spill Prevention and Response 24-hour Communications Center at 916-445-0045. Tank vessel masters should contact their agent or vessel manager/owner for additional information. The San Francisco Marine Exchange may also be able to provide mariners with additional infor-

mation and can be contacted at 915-441-6600.
(NOS/05) 20/05

Page 339—Paragraph 281, line 4; read:
regulations.) A **restricted area** surrounds the Coast Guard
Station off the E side of Yerba Buena Island. (See **334.1065**,
chapter 2, for limits and regulations.)
(33 CFR 334) 20/05

Page 340—Paragraph 283; strike out.
(NOS/05) 20/05

Page 340—Paragraph 293, line 2; read:
Island.

Regulated navigation areas

Regulated navigation areas have been established in the
waters of San Francisco Bay. (See **165.1181** and **165.1185**,
chapter 2, for limits and regulations.)
(33 CFR 165) 20/05

Page 343—Paragraph 339, line 6; read:
117.59 and **117.163**, chapter 2, for drawbridge regulations.)
(33 CFR 117) 20/05

Page 344—Paragraph 358, line 3; read:
Airport. A **security zone** has been established in the waters
surrounding the airport. (See **165.1192**, chapter 2, for limits
and regulations.)
(33 CFR 165) 20/05

Page 348—Paragraph 382, line 2; read:
Guard Island (Government Island). A **security zone** has
been established along the SW side of the island surrounding
the Coast Guard pier. (See **33 CFR 165.1190**, chapter 2, for
limits and regulations.)
(33 CFR 165) 20/05

Page 358—Paragraph 482, lines 5 to 10; read:
editions of charts for controlling depths.) A **regulated navi-
gation area** has been established in Pinole Shoal Channel.
(See **33 CFR 165.1181(e)(2)**, chapter 2, for limits and regu-
lations.) Vessels that do not meet the draft requirements to
transit the Pinole Shoal Regulated Navigation Area
(**165.1181**) follow an informal transit ...
(33 CFR 165; NOS 18654) 20/05

Page 426—Paragraph 31, lines 8 to 12; read:
with the Columbia. The Columbia River has major highways
(State, U.S., and Interstate) on the S and N sides connecting
principal cities and the towns in between.
(NOS/05) 20/05

COAST PILOT 7 37 Ed 2005 Change No. 11

Page 360—Paragraph 506, lines 1 to 8; read:

Near **Imola**, 12 miles above the Vallejo-Mare Island
Causeway bridge, a fixed highway bridge is under construc-

tion with a design clearance of 60 feet. The ...
(CL 486/05; CL 1257/03) 20/05

Page 449—Paragraph 362, line 8; read:
5 nights. Water, electricity, and pump-out facility are avail-
able at the park.
(DB 9391) 20/05

Page 495—Paragraph 270, line 13; read:
Dinner Island. In 2005, a shoal with a depth of 7 feet was
reported inside the bay in about 48°31'01"N., 123°00'08"W.
The passage W of Dinner Island should not ...
(CL 510/05) 20/05

Page 531—Paragraph 203, line 4; read:
from 37 to 41 feet. There is an 11-foot shoal about 200 ...
(NOS 18447) 20/05

Page 549—Paragraph 428, lines 5 to 8; read:
about 500 yards NW of the entrance. A fixed bridge, with a
clearance of 29 feet, crosses the waterway about 0.7 mile
above the mouth. A overhead cable, just SE of the bridge,
has a clearance of 46 feet.
(NOS 18453) 20/05

Page 557—Paragraph 534, line 6; read:
the E side of the harbor. A visible wreck, in about 47°05'
14"N., 122°55'49"W., is near the approach to the dredged en-
trance channel to Olympia.
(CL 528/05) 20/05

Page 575—Paragraph 229, lines 10 to 14; read:
State Park. State regulations forbid anchoring, except in an
emergency, and overnight mooring at other than designated
locations within the park boundaries. A copy of the regula-
tions can be obtained from the Department of Land and Nat-
ural Resources.
(CL 524/05) 20/05

Page 644—Paragraph 110, line 8 to Paragraph 125; read:
when viewed from the west.

An abandoned lighthouse, 43 feet (13.1 meters) high,
white circular concrete structure, stands at an elevation of
375 feet (114 meters), about a mile northeastward of the pier
at Garapan. Two radio masts, marked by obstruction lights,
are close to the abandoned lighthouse. Five radio towers are
on **Puntan Agingan** and are reported to serve as one of the
most visible landmarks on Saipan.

Saipan Harbor is reported to be radar conspicuous at a dis-
tance of about 20 miles.

Saipan Harbor (15°12'N., 145°41'E.), lying on the west
side of Saipan Island, includes the outer anchorage, **Gara-
pan Anchorage** and the inner harbor, **Puetton Tanapag**.

Routes

Vessels entering Puetton Tanapag should make the
approach with the light on Managaha ahead bearing **044°**,
passing on either side of the fairway buoy. When approach-

ing Lighted Buoy No. 3, course should be altered to **088°** with the harbor entrance lighted range lined up. This course leads into and through the harbor.

Channels

The northern part of Saipan Harbor, **Puetton Tanapag**, is entered through a dredged channel. In March 1999-August 2003, the channel had a controlling depth of 31 feet to the basin, thence depths of 36 to 40 feet were available in the basin.

Anchorage

The outer anchorage affords shelter during prevailing easterly winds, but none during infrequent westerly storms. This anchorage, which lies from 3 to 5 miles offshore, is suitable only as a temporary anchorage for large vessels. The inner anchorage, which includes Garapan Anchorage, contains numerous berths with depths ranging from 25 to 100 feet (7.6 to 30.5 meters), holding ground fair to good, with coarse coral sand. This anchorage lies from 1 to 2 miles offshore. Vessels can anchor in 10 fathoms (18.3 meters), sand bottom, about 0.8 mile offshore, abreast **Fina' Sisui**, off the village of **Chalan Kanoa**. Vessels can anchor in 12 to 14 fathoms (22 to 26 meters), coral bottom, in a position about 1.5 miles off **Garapan**. The anchorage area in Puetton Tanapag has depths ranging from 12 to 30 feet (3.6 to 9.1 meters). A seaplane landing area is northward of the anchorage area.

Regulated navigation area

A security zone has been established in Saipan Harbor. (See **33 CFR 165.1405**, chapter 2, for limits and regulations.)

Caution

A sewer outfall extends from a position about 200 yards southwest of the southwest corner of Pier C to a position about 600 yards north-northwest of the northwest corner of the same pier.

Unexploded ordnance has been reported to lie within Anchorage Berth L8.

Okino Reef (15°12'41"N., 145°41'48"E.), an isolated shallow area in Garapan Anchorage, has a least depth of 6 feet and is marked by a buoy on the W side.

Some mooring buoys and many wrecks are in the harbor.

Two mooring buoys are just outside the reef off **Puntan Susupi**.

Tidal Currents

Tidal currents in Saipan Channel set northwesterly at a rate of 2 1/2 knots on the flood and southeasterly at 1 1/4 knots on the ebb; turning at about the times of high and low water. In the outer anchorage of Saipan Harbor, the tidal currents are irregular, with a maximum west-northwest set of about 2 knots during the flood. In Garapan Anchorage, the tidal currents set northerly at rates of 1/2 to 1 knot during the flood and southwesterly at rates of 1/2 to 3/4 knot during the ebb. In Puetton Tanapag the tidal currents set north on the flood and south on the ebb, neither exceeding a rate of 3/4 knot. They appear to turn at times of high and low water.

Pilotage

Pilotage is compulsory; pilots board vessels in the vicinity of Tanapag Harbor Approach Lighted Buoy T.

Wharves

The port provides 2,600 linear feet of berthing space, and a 22-acre container yard. Water, fuel, electricity, and sewage pump-out are available.

(NOS/05; NOS 81067; CL 246/05; CL 188/05;

CL 1815/04; BP 184742) 20/05

COAST PILOT 7 37 Ed 2005 Change No. 12

Page 285—Paragraph 511; read:

The areas SE of the entrance channel and NW of the N jetty are subject to rapid and uncertain shoaling. Mariners are advised to approach the entrance channel from the S and to exercise caution when approaching the harbor at night.

(CL 306/05)

20/05

Page 432—Paragraph 109, lines 3 to 4; read:

power cable upstream from the bridge has a clearance of 21 feet.

(CL 1524/04)

20/05

Page 493—Paragraph 264, lines 5 to 6; read:

Lopez Island and is marked by a light.

(42/04 CG13; LL/05)

20/05

Page 496—Paragraph 286, lines 3 to 5; read:

here frequently in the summer. About 60 transient berths, electricity, gasoline, diesel fuel, water, ice, pump-out facility, and a 2-ton lift are available at the harbor.

(DB 7494)

20/05

Page 521—Paragraph 96, lines 7 to 14; read:

July 2004, the entrance had a reported depth of 11 feet with 13 feet alongside the piers. Open and covered berths for about 800 craft up to 50 feet, including 12 transient moorings, are available. Berth assignments are made by the **harbormaster**. Electricity, gasoline, diesel fuel, water, ice, and pump-out station are available in the basin.

(DB 7474)

20/05

Page 549—Paragraph 430, lines 1 to 2; read:

Sitcum Waterway, NE of Milwaukee Waterway, is maintained at more than the project depth of 40 feet.

(BP 184974; NOS/05)

20/05

Page 557—Paragraph 528, lines 5 to 7; read:

and **Dofflemyer Point**; the latter is marked by a light. The entrance to Budd Inlet is deep except for a 27-foot shoal in the middle of the entrance.

(10/05 CG13; NOS 18456)

20/05

Page 642—Paragraphs 92 to 93; strike out.

(CL 351/05; NOS 81071)

20/05

Page 642—Paragraph 96, line 4; read:
in ruins (2005). Ships drawing 25 feet (7.6 meters) can ...
(CL 351/05) 20/05

Page 647—Paragraph 162, line 5 to Paragraph 163, line 1;
read:
northeast passage.

Supply Reef, with a depth of 27 feet (8.2 meters) over it,
lies about 10 miles northwest of North Island. Supply Reef is
reported to be a circular reef of about 300-yard diameter,
marked by discolored water and by breaking seas.

Chart 81086

Farallon de Pajaros, (20°32'N., 144°54'E.), lying ...
(NOS/05; DOLE/05) 20/05

Page 655—Paragraphs 285 to 292; read:

WNG-596, Port Orford, Oreg., (42°42'N., 124°27'W.),
162.425 MHz.

KIH-32, Coos Bay, Oreg., (43°23'N., 124°07'W.), 162.40
MHz.

WNG-674, Florence, Oreg., (44°03'N., 124°02'W.),
162.500 MHz.

KIH-33, Newport, Oreg., (44°45'N., 124°02'W.), 162.55
MHz.

WWF-95, Tillamook, Oreg., (45°28'N., 123°56'W.),
162.475 MHz.

KIG-98, Portland, Oreg., (45°34'N., 122°47'W.), 162.55
MHz.

KEC-91, Astoria, Oreg., (46°22'N., 123°48'W.), 162.40
MHz.

KXI-27, Forks, Wash., (47°50'N., 124°23'W.), 162.425
MHz.

KIH-36, Neah Bay, Wash., (48°22'N., 124°40'W.), 162.55
MHz.

WWG-24, Puget Sound, Wash., (48°02'N., 122°58'W.),
162.425 MHz.

KHB-60, Seattle, Wash., (47°32'N., 121°55'W.), 162.55
MHz.

WXM-62, Olympia, Wash., (46°33'N., 122°55'W.),
162.475 MHz.

CFA-240, Mt Tuam, Canada, (48°43'N., 123°29'W.),
162.40 MHz. (Canadian Government weather radio station.)
(MSC 10/04) 20/05